

CLAIMS

1. A retroreflecting metrology target marker device comprising a target member (4) and a support (1) for that target member, characterized in that the support includes a receptacle head (12) for inserting a target member, that receptacle head including a housing (15) for inserting the target member opening to the outside via an outwardly flared frustoconical seat (16), and the target member includes a flange (42) having a spherical annular lateral surface adapted to bear tangentially against the frustoconical seat, and a plate (45) extending out of the support and upstanding perpendicularly on the flange in an equatorial plane of a spherical surface (44) of which the lateral surface of the spherical ring flange is part, that plate having two parallel plane faces at least one of which is retroreflecting or covered with a retroreflecting coating and including a hole (46) passing completely through it and centred on an axis perpendicular to the faces of the plate and passing through the centre of said spherical surface.

2. A device according to claim 1, characterized in that the hole (46) passing through the plate (45) has at least one frustoconical region (461) through which it opens to the outside, in a flared fashion, to optimize inclined sighting.

3. A device according to claim 1, characterized in that the hole (46) passing through the plate has two frustoconical regions (461) through which it opens to the outside on respective opposite sides of the plate, in flared fashion, to optimize inclined sighting.

4. A device according to claim 1, characterized in that both faces of the plate (45) are retroreflecting or covered with a retroreflecting coating.

5. A device according to claim 1, characterized in that the hole (46) passing through the plate (45) has at

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least one frustoconical region (461) through which it opens to the outside, in flared fashion, and the inclination of the wall of the frustoconical region to the axis on which the hole is centred is from approximately 35° to approximately 45°.

6. A device according to claim 1, characterized in that the plate (45) is upstanding on a circular increased thickness portion (47) of one face of the flange (42).

7. A device according to claim 1, characterized in that the target member includes a generally cylindrical body (41) joined to the flange and adapted to be inserted into the housing (15) of the receptacle head (12) of the support (1).

8. A device according to claim 1, characterized in that the support (1) includes a support base (11) adapted to be anchored into a structure on which metrology measurements are to be effected.

9. A device according to claim 1, characterized in that it includes an assembly member (3) in the form of a ring forming a nut having an inside screwthread (31) cooperating with an outside screwthread (14) of the receptacle head (12) of the support (1) and an inside surface (32) for clamping the flange against the head (12).

10. A device according to claim 1, characterized in that the spherical surface (44) is part of a sphere having a diameter approximately 25 mm to approximately 35 mm.

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